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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,304	11/14/2003	Clemens Jung	IT20030011	1219

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WHIRLPOOL PATENTS COMPANY - MD 0750  
500 RENAISSANCE DRIVE - SUITE 102  
ST. JOSEPH, MI 49085

EXAMINER
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CHAUDHRY, SAEED T

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/713,304	<b>Applicant(s)</b> JUNG ET AL.	
	<b>Examiner</b> Saeed T. Chaudhry	<b>Art Unit</b> 1746	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.  
     4a) Of the above claim(s) 7 and 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-8 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

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## **DETAILED ACTION**

### **Election/Restriction**

Restriction to one of the following inventions is required under 35 U.S.C. 121:

Group I, Claims 1-6, drawn to a device for measuring turbidity of the rinsing liquid in a dishwasher, classified in Class 134, subclass 57 D.

Group II, Claims 7-8, drawn to a method establishing a rinse program, classified in Class 134, subclass 25.2.

Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (M.P.E.P. § 806.05(e)). In this case the process as claimed can be practiced by another materially different apparatus such as measuring a turbidity in a wash cycle or the apparatus as claimed can be used to practice another and materially different process such as measuring turbidity in a washing machine such as cloth washing.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, have acquired a separate status in the art because of their recognized divergent subject matter, the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

During a telephone conversation with Mr. John F. Colligan on December 9, 2005 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-6. Affirmation of this election must be made by applicant in responding to this Office action. Claims 7-8 are withdrawn from further consideration by the Examiner, 37 C.F.R. § 1.142(b), as being drawn to a non-elected invention.

### **Joint Inventors**

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

### **Claim Rejections - 35 USC § 112**

Claims 1-6 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitations "the turbidity", "the water", "the upper and lower spray plane", "the quantity", the "type", "the continued" in lines 1, 3, 6 and 8 respectively. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "the velocity" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the length of time" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recite the limitations "the solubility", "the soiling", "the dishes" in lines 1 to 2. There is insufficient antecedent basis for this limitation in the claim.

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made

The factual inquiries set forth in *Graham v. John Deere Co.*, 148 USPQ 459, that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or unobviousness.

**Claims 1-6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sones et al in view of Thies et al.**

Sones et al (3,279,481) disclose a dishwasher having motor driven pump assembly 14 includes an electrical motor 20 operatively associated with a fluid distributing and drain pump 22 including an inlet opening 24 formed by the bottom bulkhead 16, an impeller 26 for drawing fluid from the inlet opening 24 and selectively discharging it through a first outlet 28 into a conduit 30 connected to the fluid distributing system in the washing compartment 10 (see col. 2, lines 14-24). The dishwasher discloses a sensor 114 may be a light sensitive resistance element having a positive coefficient of resistance that varies in response to increase turbidity in the washing fluid. The rinse water is circulated a beam from light source 117 can be directed through a turbidity sensing station or sight glass 118 to impinge on the light sensitive resistance 114. In case where the water carries a substantial amount of residue material reflecting dirty articles, the rate of circulation of the rinse water can be increased for producing a further cleaning action over and above that produced during normally programmed washing cycles of operation (see col. 5, lines 20-29). The reference fails to disclose that upper and lower spray plane can be operated alternately.

Thies et al (5,924,432) disclose a dish washer which provides a system for supplying wash liquid to the lower spray arm 24 when the pump is operated in one direction and for alternatively supplying the upper spray arm 26 with wash liquid when the pump is operated in the reverse direction (see col. 6, lines 49-53).

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It would have been obvious at the time applicant invented the claimed dishwasher to include a pump as disclosed by Thies et al into the dish washer of Sones et al for the purpose of reducing the amount of water used in the washing and rinsing and maintaining the effective washing ability of the dishwasher. Further, it is well known in the art to rearrange the part in a device (see In re Kuhle, 188 USPQ 7 (CCPA 1975)). Therefore, it would have been obvious at the time applicant invented the claimed dishwasher to measure the turbidity with a sensor and arrange the turbidity sensor in the inlet flow of the circulation pump since Sones et al disclose to include a turbidity sensor in the water circulation circuit and would have given the same results as of placing the sensor in the inlet of the pump. The turbidity value of the lower and upper plane and velocity of the flow of liquid in the upper and lower planes are inherent in the dishwasher of the Sones et al because the claimed dishwasher has not claimed any structure limitations which would distinguish from the cited art and the dishwasher of Sones et al and Thies et al are capable of performing these function.

#### **The Prior art**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Alvord (5,803,985) discloses a control system for a dishwasher (10) utilizing a turbidity sensor (24) to achieve an optimum fill cycle water level in a sealable chamber (12) into which soiled dishes are loaded. An electronically actuable fill valve (20) is controlled by a microprocessor (22) in response to signals received from the sensor (24) indicative of the turbidity of water in the chamber (12) during the fill cycle. Once turbidity of the water in the

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chamber stabilizes or drops to a predefined level, the fill water is determined to have reached an optimum level and the flow of supply water is shut off.

Biard (5,589,935) discloses a constant light emission from the light source permits the other light sensitive component to be used as a reliable indication of the turbidity of a solution passing between the light source and the first light sensitive component.

*Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saeed T. Chaudhry whose telephone number is (571) 272-1298. The examiner can normally be reached on Monday-Friday from 9:30 A.M. to 4:00 P.M.*

*If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Michael Barr, can be reached on (571)-272-1414. The fax phone number for non-final is (703)-872-9306.*

*When filing a FAX in Gp 1700, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are for entry into the file of the application. This will expedite processing of your papers.*

*Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-1700.*

**Saeed T. Chaudhry**  
Patent Examiner



**MICHAEL BARR**  
SUPERVISORY PATENT EXAMINER